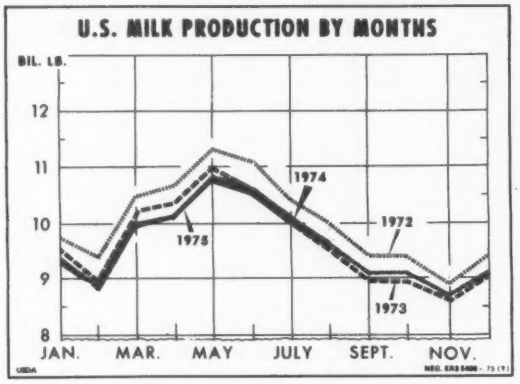
DS-357 SEPTEMBER 1975

DAIRY Situation

ECONOMIC RESEARCH SERVICE U.S. DEPARTMENT OF AGRICULTURE

CURRENT SITUATION CHARTS



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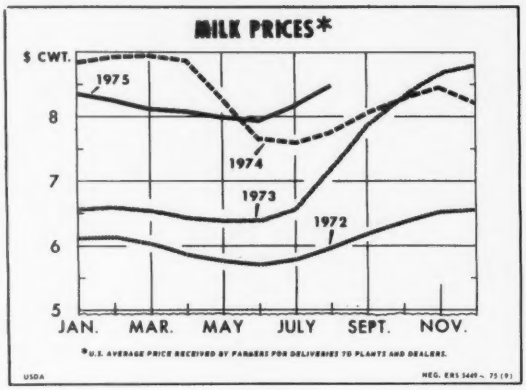

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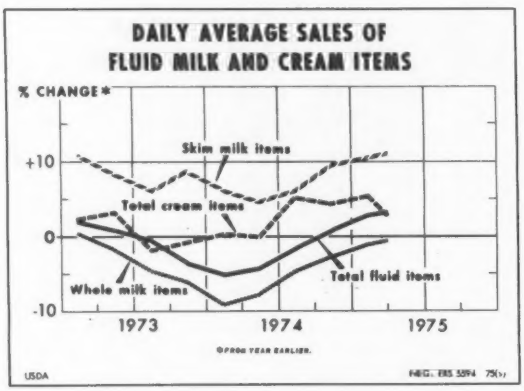

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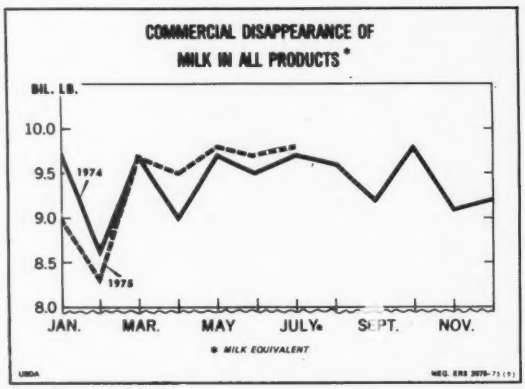

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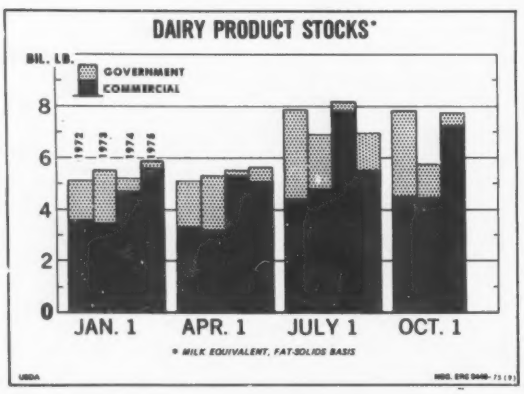

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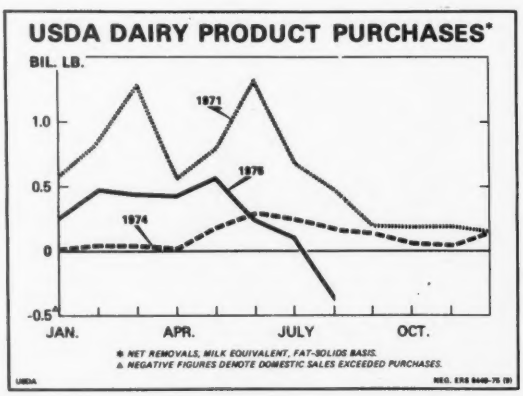

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SUMMARY

Milk production, which turned down from year-earlier levels during the spring, likely will show small increases from a year ago by late 1975. For the entire year, production is expected to total close to the 115.4 billion pounds of 1974. Farm milk prices are likely to rise seasonally during the remainder of the year and remain well above a year ago.

Milk production in August was almost 1 percent below 1974, chiefly the result of lower output per cow stemming from reduced concentrate feeding. Milk cow numbers continued down from year-earlier levels by only about half a percent, the slowest rate of decline in about two decades.

Slaughter cow prices have eased downward from the spring highs and likely will remain at low levels this fall and winter. The large number of dairy replacements on farms at mid-year and the lack of significant improvement in economic alternatives for dairymen also will help to limit declines in milk cow numbers through the rest of 1975.

Hot, dry weather during July and August in the Western Corn Belt and strengthening world demand for grain indicate higher feed costs in late 1975 and early 1976 than earlier expected. However, rising milk prices likely will lead to much more attractive feeding relationships than a year ago and somewhat heavier feeding of grain. Milk production per cow may recover and start approaching more normal gains by late 1975.

Farm milk prices rose sharply in late summer, reaching $8.47 per 100 pounds in August, up 53 cents from the June low and 73 cents above a year ago. Manufacturing milk prices also rose sharply

The *Dairy Situation* is published in March, May, July September, and December

and were more than $1 above year-earlier levels in August.

Cash receipts from dairying were up about 5 percent from a year ago this summer after being down sharply earlier this year. Gross dairy income likely will remain above year-earlier levels during the rest of the year and probably will exceed $9½ billion for all of 1975. The 2 percent gain from 1974 reflects slightly higher milk prices as milk marketings may be close to a year ago. Although feed costs were down about a tenth from August 1974, other costs have continued to rise.

Sparked by declining production, low seasonal stocks, and strong sales, wholesale butter prices have risen about 16 cents per pound since early June. American cheese prices rose about 15 cents from early May. Even nonfat dry milk prices, which had been at support purchase prices since mid-1974, moved upward 5 cents in late August and early September.

Retail dairy prices in July were down about 1½ percent from their peak in February but wholesale price rises are starting to be reflected in retail stores. Although retail dairy prices will rise in coming months, the increase from a year earlier likely will not be abnormally large and the rise for all of 1975 could well be less than yearly increases during the early 1970's.

Reduced supplies of milk available for manufacturing resulted in lower butter, American cheese, and nonfat dry milk production this summer than in 1974. American cheese production has moved closer to year-earlier levels but butter and nonfat dry milk output was down sharply. Supplies of milk for manufacturing may recover somewhat if milk production turns around or fluid sales slow due to higher retail prices.

Paced by fluid milk, ice cream, butter, and other-than-American cheese, dairy sales have been fairly strong this summer, bringing the January-July total even with a year ago. Fluid sales continue to show gains and butter sales remain relatively strong in the face of declining margarine prices. American cheese sales remain below year-earlier levels but nonfat dry milk sales have risen above the sharply reduced 1974 levels. However, much of the increase in nonfat dry milk disappearance may reflect a buildup in user inventories rather than a gain in actual use.

Declining milk production and fairly strong dairy sales caused a very unusual counterseasonal drop in commercial dairy stocks during July. On August 1, dairy stocks in commercial hands totaled 5.5 billion pounds milk equivalent, down almost a third from a year earlier. Commercial butter stocks were at low seasonal levels and manufacturers' stocks of nonfat dry milk were at the lowest August 1 level since 1950, although still adequate relative to the generally weak sales. Commercial stocks of American cheese were down considerably from last year and were considered manageable in view of reduced production and expected sales strength. Government holdings of butter and cheese not committed to specific programs were at relatively low levels but USDA had uncommitted inventories of almost 480 million pounds of nonfat dry milk.

After running fairly heavy earlier this year, USDA price support purchases of dairy products ceased this summer with the rises in wholesale prices. Almost 21 million pounds of butter were sold back to the industry, which helped ease the tight market. Little if any USDA purchases are expected during the rest of 1975 as market prices are likely to remain generally above support purchase prices.

Exports of nonfat dry milk under the Food for Peace program have been fairly large this year and about 200 million pounds more may be programmed for donation before next July. U.S. imports of dairy products this year have been below the levels of the early 1970's. Most of the decline has been due to below-normal imports of cheese.

OUTLOOK CONFERENCE SCHEDULED FOR NOVEMBER 17-20

The 1976 outlook for U.S. agriculture, the general economy, inputs, and foreign agricultural trade will receive particular attention at the National Agricultural Outlook Conference to be held at the U.S. Department of Agriculture's (USDA) Jefferson Auditorium in Washington, D.C. from Nov. 17 through 20. The Conference, sponsered by USDA's Economic Research Service and Extension Service, will also feature presentations and panel discussions by leading authorities in agriculture and business on commodities and family living concerns.

The Dairy Outlook session is scheduled for Wednesday afternoon, November 19, 1975.

DAIRY SITUATION

SITUATION AND OUTLOOK

PRODUCTION

Milk Ouput Down

Milk production in August was almost 1 percent below a year earlier, the fourth straight monthly decline from a year ago in milk output. However, the August decline from a year ago was less than in either June or July. Milk production during the first 8 months of 1975 totaled 79.1 billion pounds, down almost a half percent from the same months of 1974.

U.S. milk production

Month	1974	1975	Change
	Million pounds	*Million pounds*	*Percent*
January	9,287	9,301	+.2
February	8,765	8,775	+.1
March	9,988	10,023	+.4
April	10,122	10,121	0
May	10,841	10,789	-.5
June	10,563	10,460	-1.0
July	10,139	9,998	-1.4
August	9,690	9,609	-0.8
September	9,140		
October	9,125		
November	8,669		
December	9,087		
Total	115,416		

Changes in milk output per cow have been the major source of variation in total milk production this year. After showing very small gains earlier this year, milk production per cow fell below year-earlier levels in June for the first time since late 1973. The summer declines reflect the continued effects of lower grain and other concentrate feeding. While the primary cause of lower feeding rates was high feed costs, tight grain supplies made it harder to obtain feed when home-grown supplies were exhausted. Although there have been localized roughage problems, pasture conditions generally have been better than both last year and average in many important dairy States.

The declines from a year ago in the number of milk cows on farms have remained around a half percent thus far in 1975. This very slow rate reflects relatively low cull cow prices, limited economic alternatives for dairymen, and the large numbers of replacement heifers available. Milk cow numbers dropped 62,000 head from January to July, which was the same decline as a year ago. Cow numbers decreased by an additional 5,000 head in August, compared to a 2,000 head increase in August 1974. Cull cow prices have been fairly steady in recent months with Utility cows at Omaha selling in the $20-23 range, down somewhat from late spring.

Change in milk cow numbers, 1966-75

Year	Change from year earlier	
	January-June	July-December
	Percent	*Percent*
1966	-6.1	-5.7
1967	-4.8	-4.5
1968	-4.4	-4.3
1969	-4.2	-3.9
1970	-3.1	-2.0
1971	-1.4	-1.2
1972	-1.1	-1.3
1973	-2.1	-2.9
1974	-2.3	-1.0
1975	-.5	

Of the five major dairy States, California and Wisconsin had greater milk production in August than a year ago. The 7 percent decline in Minnesota was the sharpest and it was the only State of the five to have fewer cows than a year earlier. However, milk output was also down in Pennsylvania and New York. Of the remaining 29 States that report monthly, 18 had lower production than a year earlier.

July-August milk production was up only in the Pacific region, about the same in the Appalachian and Southeast regions, and down in other regions. After showing gains throughout late 1974 and early 1975, the Northeast fell below year-earlier levels this summer. The Lake States showed declines in milk output during much of 1975 but the drops sharpened this summer.

Recovery Subject to Many Factors

Milk production is likely to recover later this year although milk output will depend on a number of factors:

(1) Dry weather in the western Corn Belt during July and early August and strengthening

world demand for grain have altered the feed price outlook. Feed prices rose in August with 16 percent dairy ration reaching $135 per ton. However, this was $17 under the August 1974 level. The milk-feed ratio was well above a year earlier and likely will remain above during the rest of the year, which may stimulate somewhat heavier feeding of milk cows.

(2) Larger feed crops will result in much greater availability of home-grown and locally grown feed and may help increase feeding rates in the Midwest.

(3) Silage quality likely will be improved this year but high quality hay may be in tight supply.

(4) Milk cow replacements remain in large supply. The number of dairy replacement heifers, 500 pounds and over, on farms on July 1 this year was slightly greater than in either 1973 or 1974. The number of replacements per 100 milk cows stood at 35.3 on July 1, up from 35.0 a year ago.

(5) The value of dairy cows averaged $411 per head in August, up $21 from March but down $86 from a year earlier.

(6) Farm milk prices have risen sharply in recent months, reflecting the strength in wholesale butter, cheese, and more recently, nonfat dry milk markets. Milk prices have been well above year-earlier levels in recent months and are likely to remain considerably above during the rest of 1975 while rising seasonally.

(7) General economic conditions appear to be improving. Real disposable personal income is likely to begin a steady advance in the next few months. The unemployment rate has dropped from the May peak, reaching 8.4 percent in August, but is expected to remain fairly high. This means off-farm alternatives for dairymen are not likely to improve much this fall and winter.

(8) The index of prices paid by farmers has risen steadily since March. While most inputs likely will remain high-priced during the rest of the year, increases probably will be less rapid than a year ago.

Under these conditions, the chances now are slimmer for very strong gains in milk output later this year as feed prices are likely to be higher than earlier expected. While higher farm milk prices and much larger supplies of home-grown grain will tend to increase feeding rates this fall and winter, the boosts may not be dramatic. However, output per cow likely will recover and may start approaching more normal gains by the end of the year. Feed prices will continue to be a very important determinant of feeding rates and levels of milk production per cow. The pattern of feed prices during the rest of 1975 will not be known until the size of the crop is assured and the extent of exports becomes clearer. Changes in feed prices could alter the outlook for milk output per cow.

On the other hand, the drop in milk cow numbers likely will remain relatively small. Continued low slaughter cow prices, little improvement in dairymen's economic alternatives, and the large number of replacement heifers will all help to limit the declines. During late 1975, the decline from a year earlier may be slightly greater than at present due to the very unusual buildup in the number of dairy cows during the second half of 1974.

Milk cows and replacements, 1972-75

Month and year	Milk cows	Replacement heifers, 500 pounds and over	
		Number	Per 100 cows
	1,000	*1,000*	*Numbers*
1972			
January 1	11,778	3,828	32.5
July 1	11,696	N.A.	N.A.
1973			
January 1	11,624	3,874	33.3
July 1	11,387	3,918	34.4
1974			
January 1	11,286	3,942	34.9
July 1	11,191	3,900	34.8
1975			
January 1	11,217	4,095	36.5
July 1	11,149	3,932	35.3

Milk production in late 1975 likely will recover and show some increase from year-earlier levels, as gains in output per cow more than offset the small declines in milk cow numbers. This would bring total milk production for the year somewhere close to the 1974 total of 115.4 billion pounds.

Feed Prices Strengthen

Prices of most grains rose in July and August after holding fairly steady since early this year. These midyear price gains were initially the result of the increased U.S. grain sales to the USSR and later of reduced U.S. grain crop prospects. Corn at Chicago was running around $3.00 per bushel in mid-September, up about 25 cents since the beginning of July.

Reduced crop prospects plus prospective strong export demand suggest strong corn prices again this fall. After prices peak early this autumn, they may make only a modest seasonal drop at harvest time. On the basis of the September crop forecast and a strong export demand, Chicago cash corn prices in October-December could run in the neighborhood of $2.75 to $3.25 per bushel, down about 15 percent from last year's range. Sluggish feed de-

mand will tend to temper any price increase through the winter.

As of September 1, this year's corn crop is forecast at 5.7 billion bushels and the soybean crop at 1.4 billion bushels, both up about a fifth from last year. Dry weather reduced crop prospects since mid-year in the western Corn Belt.

The large 1975 soybean crop, coupled with a big carryover, will provide an ample supply for the domestic crushing industry. Soybean meal prices fluctuated around $130-139 per ton in mid-September. The meal market probably will continue to be unstable but fourth quarter prices likely will average below last year's average $150 per ton Decatur price.

The cost of dairy feed also rose in August, after holding fairly stable from March to July. In August, farmers paid an average of $135 per ton for 16 percent protein dairy ration, up from $130 in July, but down from $152 a year earlier. With ingredient prices expected to remain strong, dairy feed prices probably will continue strong in coming months, although below levels of a year ago.

The milk-feed price ratio rose slightly at mid-year with higher milk prices just barely offsetting increased dairy ration values (figure 7). In August, the ratio (pounds of concentrate ration equal in value to 1 pound of milk) was 1.39, up slightly from June. However, the ratio averaged 1.16 in August 1974. Milk-feed price relationships likely will remain well above year-earlier levels during the rest of 1975.

Although declining seasonally, pastures across the Nation were generally in good condition at the beginning of September. At a rating of 76, September 1 pasture conditions were up 5 points from

Milk-feed price ratio[1]

Month	1973	1974	1975
	Pounds	*Pounds*	*Pounds*
January	1.59	1.53	1.25
February	1.58	1.51	1.33
March	1.52	1.49	1.38
April	1.51	1.51	1.36
May	1.40	1.45	1.36
June	1.26	1.36	1.36
July	1.35	1.29	1.40
August	1.27	1.16	1.39
September	1.51	1.21	
October	1.57	1.21	
November	1.62	1.22	
December	1.57	1.20	
Average	1.46	1.33	

[1] Pounds of concentrate ration equal in value to 1 pound of milk.

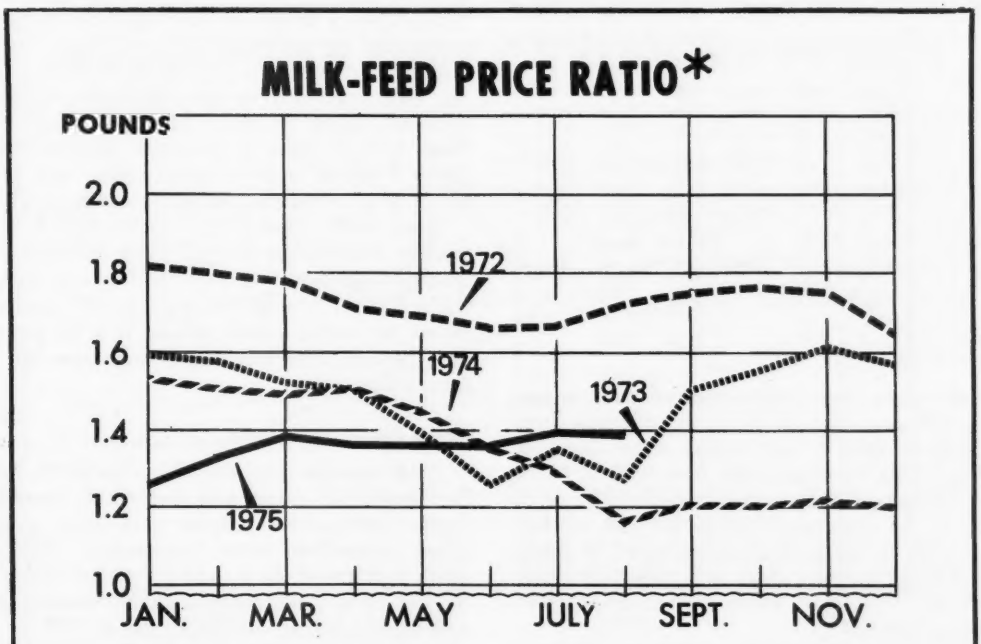

Figure 7

a year ago and about average for that date. However, hot dry weather in a large area of the upper Midwest reduced pasture conditions materially during July and August. Pastures have remained generally in good condition this year in the Northeast and Western States.

This year's hay crop, estimated at 130 million tons on September 1, is up 3 percent from 1974. Increases in both acreage and yield account for the larger crop. Moisture shortages during July and August limited tonnage from second and third cuttings in many areas, although quality was reported good. Hay supplies will be down slightly from a year earlier because of the smallest May 1 carryover since 1965. Hay prices remain strong, reflecting record cattle numbers and more roughage feeding. Farmers paid an average $64 a ton for alfalfa hay in August, up 3 percent from a year ago. Strong hay demand is likely to bolster prices in coming months.

PRICES AND INCOME

Farm Milk Prices Up Sharply

Farm milk prices have shown strong seasonal rises this summer due to reduced supplies of milk available for manufacturing and the resulting rises in wholesale butter and cheese prices. Farmers received an average $8.47 per 100 pounds of milk in August, up 28 cents from July and 73 cents from last August. The rise from the June seasonal low was 53 cents, compared with only 5 cents last year and an average June-August rise of 35 cents during 1969-73.

Milk prices received by farmers

Month	All sold to plants			Manufacturing grade		
	1973	1974	1975	1973	1974	1975
	Dollars per 100 pounds					
January	6.56	8.89	8.33	5.52	8.13	7.00
February	6.60	8.92	8.28	5.52	8.15	7.04
March	6.54	8.96	8.13	5.57	8.14	7.01
April	6.43	8.84	8.09	5.59	7.75	7.04
May	6.40	8.25	7.98	5.60	6.86	7.05
June	6.40	7.69	7.94	5.61	6.42	7.08
July	6.57	7.61	8.19	5.72	6.31	7.25
August	7.19	7.74	8.47	6.29	6.46	7.49
September	7.87	8.07		6.93	6.81	
October	8.32	8.34		7.45	7.03	
November	8.66	8.48		7.76	7.02	
December	8.80	8.25		8.00	6.74	
Average	7.14	8.32		6.20	7.13	

Manufacturing milk prices reached an average $7.49 per 100 pounds in August, up 41 cents from June and $1.03 from a year earlier. After showing no seasonal decline during the first half of 1975, manufacturing milk prices started to climb in July. Adjusted to the annual average fat test, manufacturing milk prices in August averaged 35 cents above the $7.24 support level and about 68 cents above the January level, when the current support price became effective.

American cheese plants paid about 13 cents more for milk of equivalent fat test than did butter-powder plants in July. This reflects the somewhat stronger rises in wholesale cheese markets than in the butter and nonfat dry milk markets.

Minimum Class I prices in Federal order markets will average $9.79 per hundred pounds in October, up $1.30 from last October and 89 cents from February. These increases reflect the rises since the beginning of 1975 in the Minnesota-Wisconsin (M-W) price, the mover of Class I prices in Federal order markets. The M-W price has risen in every month of 1975 with sharp jumps coming in July and August.

The decline in the estimated over-order payments on Class I milk, which began in February, continued through the summer months. The average over-order payment dropped to approximately 50 cents from around $1 per 100 pounds at the beginning of the year, the result of increasing minimum Class I prices coupled with relatively stable negotiated prices. With minimum Class I prices increasing by larger amounts in September and October, cooperatives have been announcing higher negotiated prices in order to more quickly reflect these higher prices in producer returns. Minimum Class I prices under Federal orders are based on the M-W price for the second preceding month.

Farm milk prices likely will continue to rise seasonally during the rest of 1975 although the increases may begin to slow. Butter and fluid sales remain fairly strong but could be substantially affected by rising retail prices. If milk production does recover, this would also help slow the rise in farm milk prices.

Gross Dairy Income Up

Cash receipts from dairying rose above year-earlier levels in June and remained considerably higher this summer. Higher milk prices more than offset somewhat lower marketings, resulting in gross income about 5 percent greater than June-August 1974. Cash receipts should remain above a year earlier during the remainder of 1975.

Production costs continue to rise. Prices paid by U.S. farmers for all production items were about a tenth above a year earlier during June-August, even though dairy ration prices were about the same.

Gross income from dairying likely will exceed $9½ billion for all of 1975, up only about 2 percent from 1974. Slight increases in milk prices will produce the gain as milk marketings by farmers may be close to year-earlier levels. Feed costs will be an important factor in the income situation on dairy farms during the rest of the year as gross income will be above a year ago and other costs will continue to rise.

Wholesale Markets Strong

Wholesale dairy product prices have risen on a broad front in recent months (figure 8). American cheese prices started to rise again in mid-July following the early seasonal rises of late May. In mid-September, 40-pound blocks at Wisconsin assembly points were quoted at 94.6 cents per pound, up about 12 cents from early July and 15 cents from early May. Barrel cheese has posted similar gains, reaching 90.8 cents per pound in mid-September. The rises in American cheese prices were sparked by continued declines in production, less-than-normal seasonal increases in commercial stocks, and recovering cheese sales. Wholesale Swiss cheese prices also have risen with Grade A blocks at Wisconsin assembly points reaching about $1.17 by mid-September.

Concern that current production and commercial butter stocks might not be sufficient to meet current and expected demand caused wholesale butter prices to rise sharply in July and early August. Butter prices moved up slowly in recent weeks as CCC-owned butter was sold back to the industry for unrestricted use. In mid-September, Grade A butter was selling for about 85 cents per pound at Chicago, up about 16 cents from early June.

Wholesale prices of nonfat dry milk began to move upward in August. The market had been dominated by heavy supplies and weak demand during the first half of 1975. In mid-September, prices of nonfat dry milk averaged 65.4 cents per pound (high heat, Central States production area), up about 5 cents from July when market prices were near the support purchase price. Declining production and moderate manufacturers' stocks contributed to the rise but a moderate building of user inventories probably was the most important factor.

Whey powder markets have also strengthened very slightly. Edible whey powder in the Central States production area was selling for almost 8 cents per pound in mid-September, while dried whey for animal feed was quoted at about 6 cents per pound. Lactose prices have eased from early

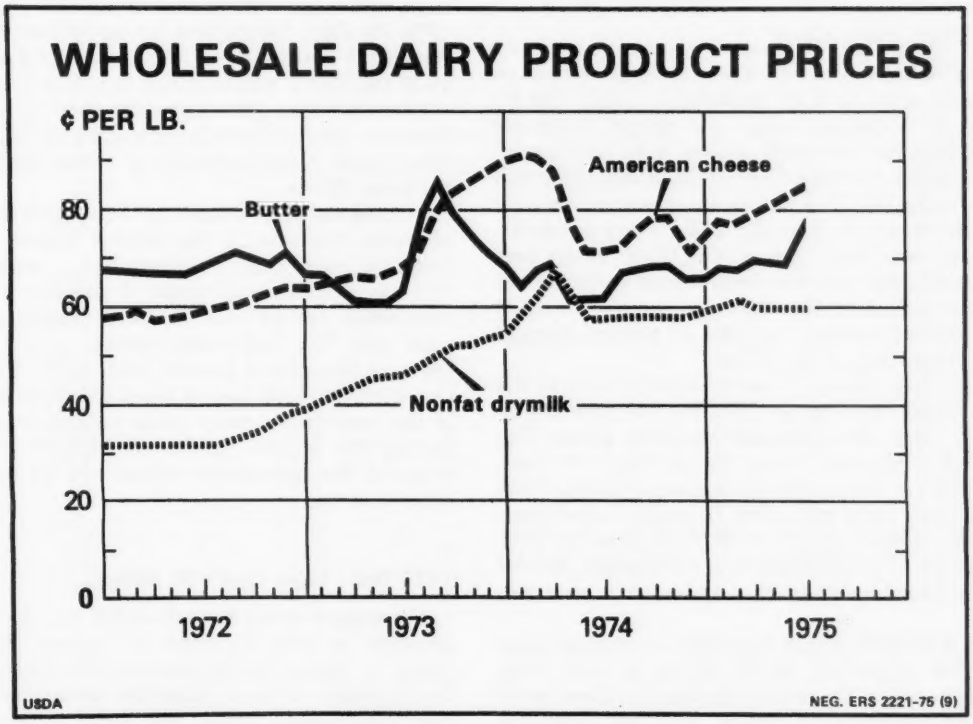

Figure 8

summer's levels, reaching about 18 cents per pound (Eastern area) by mid-September. Although production has been running below year-earlier levels, imports have been higher and demand has weakened since earlier this year.

Wholesale ice cream prices in August had held about steady since May and were lower than early 1975. Ice cream prices likely will rise in coming months as prices of dairy ingredients rise and sugar prices have stopped declining. Manufacturers' selling prices for evaporated milk averaged $12.03 per case in July, about the same as earlier this year.

The wholesale dairy price index, as reported by the Bureau of Labor Statistics (BLS), stood at 156.3 (1967=100) in August, up almost 4 percent from June and 10 percent from last August. The August 1975 index was the highest reading thus far this year while the August 1974 level was close to the lowest of last year.

While wholesale butter and cheese prices may continue to rise, the sharpest seasonal jumps may be behind us. Any recovery in milk production or substantial consumer resistance to the increased retail prices would tend to slow wholesale dairy prices. Total dairy stocks in commercial hands are well above the levels of the early 1970's and might start to check further price rises. The strength in the nonfat dry milk market may be short-lived if actual use has not increased.

Retail Dairy Prices Rising

Retail dairy prices will rise in coming months as wholesale price rises are reflected at retail. The increases in wholesale butter and cheese prices are now being felt in retail stores with further increases likely to come. Fluid milk prices likely will rise in early fall. The rise in ice cream prices may be more moderate than for other dairy products. Although retail dairy prices may climb in the next few months, the increase from a year earlier is not likely to be abnormally large and the rise for all of 1975 could well be less than the 4½ percent average annual rise of the early 1970's.

Retail dairy prices in early summer were at the lowest levels thus far in 1975 but are now beginning to reflect the increased wholesale prices. The BLS index of retail dairy prices stood at 153.4 (1967=100) in July, down more than 1 percent from the February peak but about 1 percent higher than last July. Retail prices of all food items in July were about 11 percent above a year earlier and all items in the Consumer Price Index were up 9 percent.

July fluid milk prices were the lowest since January 1974 (figure 9). Retail prices in July were down more than 2 cents per half-gallon from early 1975 and more than a penny from last July. Ice cream prices at retail were down slightly from earlier this year but still were up about 12 percent from a year ago. However, this was the smallest gain this year from year-earlier levels.

Retail dairy product prices

Item	Unit	July 1973	July 1974	Dec. 1974	July 1975
All dairy products	1967=100	124.1	151.6	155.3	153.4
Butter	c/lb.	85.0	90.3	96.4	95.7
Processed American cheese	c/½-lb.	59.4	72.3	73.0	75.1
Ice cream	c/½-gal.	88.8	108.4	119.3	121.3
Whole milk: At stores	c/½-gal.	63.2	78.4	79.2	77.0
Evaporated milk	c/can	22.4	29.2	30.4	30.4
Skim milk: At stores	c/qt.	33.3	41.5	42.2	42.1

The rise in retail cheese prices (American process) accelerated somewhat in July. The July price was up almost 4 percent from a year earlier, although still slightly below the record-high level of May 1974. The July price rise did not fully reflect the May and June wholesale price rises.

Retail butter prices reached almost 96 cents per pound in July, up about 6 percent from year-earlier levels and about 4 percent from January. Meanwhile, margarine prices continued to decline, with July down about 17 percent from the January high, although still almost 9 percent above July 1974. In July, butter was not as favorably priced relative to margarine as during late 1974 and early 1975 and likely will continue to lose price favor as wholesale butter price increases show up at retail. However, retail price relationships probably will remain much more favorable to butter than during the early 1970's.

During the second quarter of 1975, the retail cost of dairy products in the market basket of farm foods fell more than 1 percent from a year earlier. The farm value was down 6 percent while the farm-retail spread was about 3 percent above a year ago. The farm-retail spread was 2 percent lower in the second quarter than in the first quarter of 1975, which helped boost the farmer's share of the consumer's dairy dollar to almost 48 cents. During the second quarter of 1974, the farmer's share of the consumer's dollar was an unusually high 50 cents.

1974 Dairy Sales Over $21 Billion

Consumers spent more than $21 billion for dairy products in 1974, up about 12 percent from 1973 (table 1). Higher prices accounted for almost all of the increase since commercial disappearance of dairy products increased just slightly. Retail dairy prices rose more rapidly than either income or

Table 1--Consumer expenditures for food and dairy products, income, and labor required to purchase specified dairy products, selected years, 1950-74

Year	Disposable personal income	Consumer expenditures				
		For all foods 1/		For dairy products		
		Amount	As a percentage of income	Amount	As a percentage of: Income	As a percentage of: All food expenditures
	Bil. dol.	Bil. dol.	Pct.	Mil. dol.	Pct.	Pct.
1950	206.9	46.0	22.2	8,157	3.9	17.7
1955	275.3	58.1	21.1	10,301	3.7	17.7
1960	350.0	70.1	20.0	12,098	3.5	17.3
1965	473.2	85.8	18.1	13,049	2.8	15.2
1966	511.9	92.0	18.0	13,606	2.7	14.8
1967	546.3	93.9	17.2	13,698	2.5	14.6
1968	591.0	99.7	16.9	14,882	2.5	14.9
1969	634.4	104.1	16.4	15,460	2.4	14.9
1970	691.7	112.1	16.2	16,102	2.3	14.4
1971	746.4	116.8	15.7	16,687	2.2	14.3
1972	802.5	123.4	15.4	17,651	2.2	14.3
1973	903.7	143.6	15.9	18,900	2.1	13.2
1974 2/	979.7	164.5	16.8	21,085	2.2	12.8

Year	Time worked to earn money to purchase 3/				
	Butter, 1-lb.	Milk at stores, ½-gal.	American cheese, ½-lb.	Ice cream, ½-gal.	Evaporated milk, 14½-oz. can
	Minutes				
1950	29.6	15.8	11.7	4/35.6	5.1
1955	22.5	13.8	10.2	26.6	4.3
1960	19.5	12.8	9.0	22.2	4.1
1965	17.3	10.9	8.7	18.1	3.5
1966	17.9	11.0	9.2	17.5	3.5
1967	17.6	10.9	9.2	17.2	3.6
1968	16.7	10.7	8.8	16.1	3.4
1969	15.9	10.4	8.8	15.3	3.3
1970	15.5	10.2	9.0	15.1	3.3
1971	14.8	9.9	8.9	14.4	3.3
1972	13.7	9.4	8.6	13.5	3.1
1973	13.5	9.6	8.9	13.4	3.3
1974 2/	12.9	10.7	9.9	14.7	3.9

1/ Excludes alcoholic beverages, food donated by the Government, non-personal spending for food, and institutional food use. 2/ Preliminary. 3/ Based on hourly wage rates of all manufacturing industries. 4/ 1951.

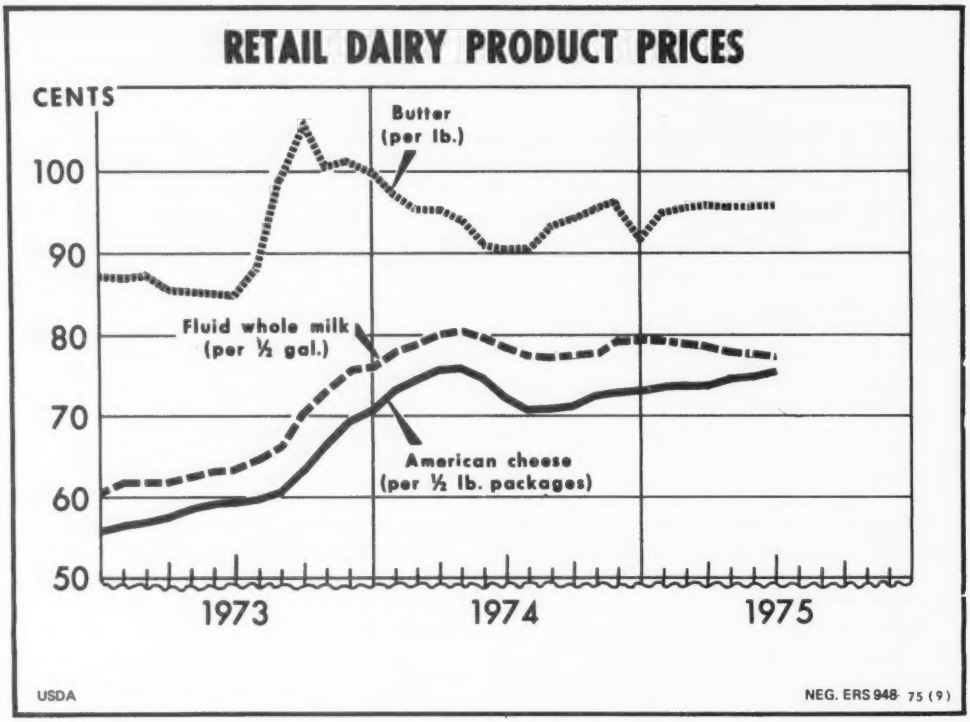

Figure 9

prices of food as a whole. However, less than 2.2 percent of disposable personal income was used to buy dairy products in 1974, about the same as in 1972 and 1973. Dairy products accounted for about 13 percent of consumer expenditures for all foods in 1974.

The average wage earner had to work 78 minutes per week in 1974 to earn the dairy products in the market basket of farm foods (figure 10). This was up 7 minutes from 1973 and was the highest in the 1970's. Until 1973, the amount of labor required to purchase dairy products had declined steadily as wage rates rose faster than retail dairy prices.

Of the $21.1 billion consumers spent for dairy products last year, $9.2 billion represented the farm value and $11.9 billion the marketing bill. The farmer's share of the retail dairy dollar rose somewhat in 1974 as the farm value increased more than the marketing bill.

Almost three-fourths of consumer expenditures for dairy products in 1974 were for use at home. At-home expenditures increased about 13 percent from the 1973 level. Consumers also increased their purchases of dairy products away from home. This increase occurred in public eating places since purchases in institutions declined slightly.

Item	Consumer expenditures for dairy products[1]	
	1973	1974
	Billion dollars	*Billion dollars*
At-home	13.8	15.6
Away-from-home	5.1	5.5
Public eating places	3.4	3.8
Institutions	1.7	1.6
Total	18.9	21.1

[1] Totals may not add due to rounding.

UTILIZATION

Butter and Cheese Output Down

Around 2 percent less milk moved into manufactured dairy products during January-July than a year earlier as increased fluid milk sales and lower milk production tightened supplies for processing. By midyear, less milk than last year was going into butter, nonfat dry milk, and American cheese production while more was going into other cheese and ice cream. In June and July, butter was taking about 10 percent less milk than a year earlier while milk used to manufacture American cheese was down about 9 percent.

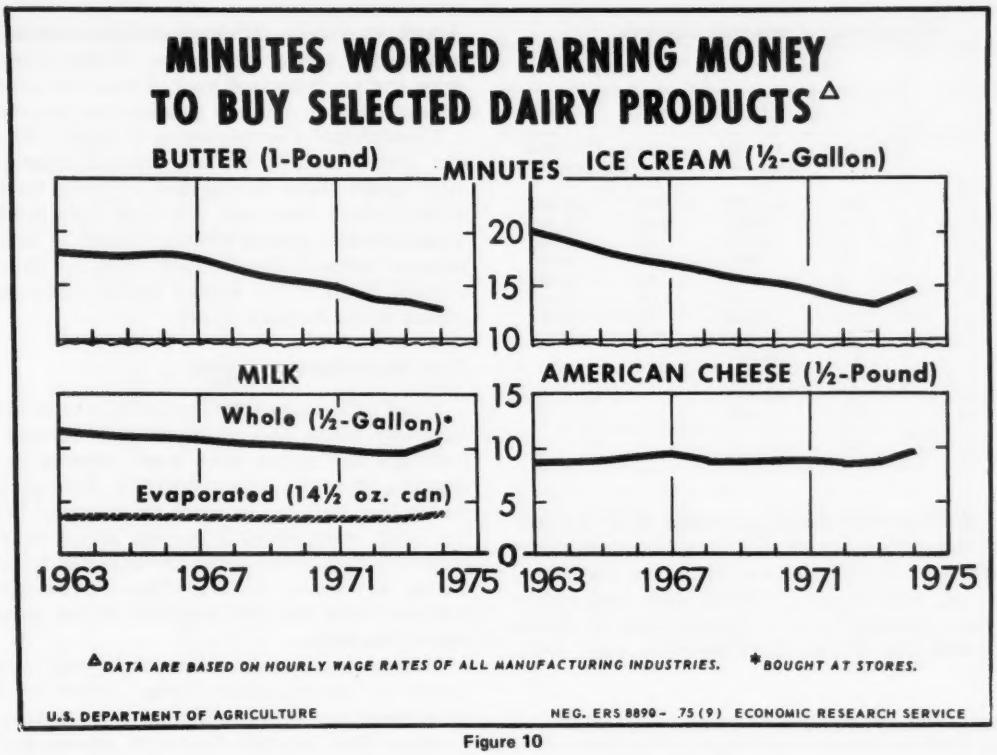

Figure 10

American cheese production continues to move closer to year-earlier levels. Down about 16 percent during the first half of the year, July production was down only about 7 percent and weekly production estimates indicate that the August production was also down about 7 percent. Production of other cheese varieties was up about 5 percent from year-earlier levels during the first 7 months of this year. Cream and Neufchatel output was up strongly with Brick and Muenster and Italian types continuing to show gains. Swiss and Blue cheese production were below a year ago.

Production of selected manufactured dairy products, 1974-75

Item	January-July		Change from year ago	
	1974	1975[1]	1974	1975[1]
	Million pounds	*Million pounds*	*Percent*	*Percent*
Butter	599.8	645.2	-2.9	+7.6
Cheese:				
American	1,222.4	1,041.9	+18.0	-14.8
Other	618.8	647.1	+2.5	+4.6
Cottage, creamed	515.7	532.3	-13.8	+3.2
Canned milk	685.5	576.4	+.2	-15.9
Dry whole milk	49.5	36.2	-4.6	-26.9
Ice cream (Mil. gal.)	462.6	504.8	-.1	+9.1
Milk equivalent[2]	38,389	37,687	+4.1	-1.8
Nonfat dry milk	662.5	728.9	+2.6	+10.0

[1] Preliminary. [2] Total all reported manufactured products.

Butter production, while up nearly a fourth during the first quarter of the year, slipped below year-earlier levels in May and has continued to decline. July production was down about 13 percent from 1974 levels as was the indicated August output.

Production of nonfat dry milk dropped below year-earlier levels in June and July. While total production during the first 7 months was 10 percent above 1974 levels, production was down 17 percent in July. Nonfat dry milk output may continue below year-earlier levels in coming months.

Ice cream production has continued strong, up about 9 percent from year-earlier levels during January-July this year. Ice milk production gained slightly, while less sherbet was produced. Output of both creamed and lowfat cottage cheese this summer showed small gains from a year ago but remained at relatively low levels.

Supplies of milk available for manufacturing may recover somewhat later this year if the expected recovery in milk production occurs. In addition, rising retail prices may slow fluid milk sales and push relatively more milk into manufactured products.

Dairy Sales Strong

After being down in the first quarter, total dairy sales strengthened this spring and remained strong into early summer, bringing the January-

Wisconsin out-of-state milk shipments

Month	1974		1975	
	Loads	Volume	Loads	Volume
	Number	*Thousand pounds*	*Number*	*Thousand pounds*
January	640	30,080	252	11,844
February	212	9,964	135	6,345
March	58	2,726	138	6,486
April	18	846	54	2,538
May	2	94	54	2,538
June	15	705	49	2,303
July	34	1,598	77	3,619
August	90	4,230	164	7,708
September	352	16,544		
October	212	9,964		
November	457	21,479		
December	298	14,006		
Total	2,388	112,236		

July total even with the same period of 1974. Commercial disappearance of milk in all dairy products totaled about 65.9 billion pounds during the first 7 months of 1975 (table 2). Fluid milk and butter sales have remained above a year earlier but American cheese and nonfat dry milk sales were down (table 3).

Changes in January-July dairy sales from year earlier

Item	Change
	Percent
Total milk[1]	+0.1
Manufactured products:	
American cheese	-12.2
Other cheese	+.6
Cottage cheese[2]	+3.0
Butter	+12.5
Ice cream	+9.1
Ice milk	+1.1
Canned milk	-9.7
Nonfat dry milk	-33.3
Fluid products:[3]	+2.8
Whole milk	-.7
Skim and lowfat milk	+10.9
Cream and mixtures	+4.0

[1] On a milk equivalent, fat-solids basis. [2] Creamed and low-fat. [3] January-June.

Commercial use may continue to increase slightly in coming months as the general economy recovers and real consumer purchasing power gains. Retail dairy prices likely will continue to rise seasonally in coming months. Even with slightly rising butter prices and falling margarine prices, commercial disappearance of butter in the second quarter was about 10 percent above the corresponding quarter of a year ago. Butter sales in coming months likely will remain relatively strong, although gains from the strong second half sales of 1974 are likely to diminish.

Cheese sales have continued the recovery which began in the second quarter. Disappearance of American cheese, although gaining, remains below year-earlier levels while sales of other cheese varieties are up from last year. Moderate increases in cheese prices should not greatly slow the recovery.

Commerical disappearance of nonfat dry milk in the first 7 months of 1975 was off sharply from 1974 levels. Sales during January-July were about a third below last year, although July commercial disappearance moved sharply ahead of last July's reduced levels. Some strength from the sharply depressed levels of the second half of last year is expected in the months ahead.

Fluid Sales Continue Gains

Fluid milk sales thus far in 1975 have been considerably above last year's sharply reduced levels, although the gains have been slowing in recent months. In major urban markets, fluid milk sales, which had been up as much as 4 percent earlier in the year, were about 2 percent above year-earlier levels in July. Fluid sales are expected to continue strong in coming months, although retail price increases could dampen potential gains during the rest of the year.

During January-July, total fluid milk sales were almost 3 percent above year earlier in Federal order markets. Whole milk sales were only down about a half percent. Gains in lowfat and skim milk sales have declined during the summer, although they remained sizable.

USDA Dairy Purchases Cease—Butter Sold

USDA purchases of dairy products have virtually ceased as wholesale prices moved above support purchase prices. After running heavy in early 1975, CCC purchases started to slow in late spring. During July-August, CCC had net sales of almost 0.3 billion pounds milk equivalent as sales of butter for unrestricted use far outweighed the small purchases. This compared with net removals equivalent to 0.4 billion pounds of milk during July-August 1974. Net removals during the first 8 months of 1975 totaled 2.1 billion pounds milk equivalent, up from 1.0 billion pounds during the same period last year.

USDA dairy purchases[1]

Item	January-August		Change
	1974	1975	
	Million pounds	*Million pounds*	*Percent*
Butter	33.9	66.7	+96.8
American cheese	23.6	68.1	+188.6
Nonfat dry milk	149.1	411.5	+176.0
Evaporated milk	21.1	17.5	-17.1
Milk equivalent	992	2,089	+110.6

[1] Deliveries minus unrestricted sales.

Table 2.--Commercial disappearance: Total milk, annual and by quarters, 1973-75 1/

Item	1973	1974					1975 2/				
		By quarters					By quarters				
		1st	2nd	3rd	4th	Annual	1st	2nd	3rd	4th	Annual
	Billion pounds										
Production	115.4	28.0	31.5	29.0	26.9	115.4	28.1	31.4			
Farm use	3.4	.8	.8	.8	.8	3.3	.8	.8			
Marketings	112.0	27.2	30.7	28.1	26.0	112.1	27.3	30.6			
Beginning commercial stocks	3.5	4.7	5.3	7.8	7.2	4.7	5.6	5.0			
Imports	3.9	1.4	.4	.4	.6	2.9	.3	.2			
Total supply	119.4	33.4	36.4	36.4	33.9	119.7	33.2	35.8			
Ending commercial stocks	4.7	5.3	7.8	7.2	5.6	5.6	5.0	5.5			
Net removals	2.2	.1	.5	.5	.2	1.3	1.1	1.2			
Commercial disappearance											
Actual	112.4	27.9	28.1	28.6	28.1	112.8	27.0	29.1			
Percent change 3/	4/-.3	+3.9	-3.9	+1.2	+.3	+.3	-3.2	+3.2			

1/ Milk equivalent, fat solids basis. Totals may not add due to rounding. 2/ Preliminary. 3/ From year earlier using unrounded data. 4/ On a daily average basis.

Table 3.--Commercial disappearance: Selected dairy products, United States, annual 1965-74, by quarters, 1974-75

Year and quarter	Butter, creamery 1/	Cheese		Nonfat dry milk	Canned milk	Frozen products 3/
		American 2/	Other			
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. gal.
1965	1,095.8	1,124.4	665.2	942.1	1,841.7	1,033.4
1966	1,086.0	1,207.8	706.2	1,156.8	1,776.8	1,038.7
1967	973.9	1,175.9	738.2	1,012.2	1,571.5	1,040.2
1968	976.0	1,213.3	803.0	1,058.0	1,496.8	1,082.3
1969	921.9	1,281.0	861.6	1,042.1	1,376.1	1,092.2
1970	898.2	1,398.0	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	855.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,269.5	809.9	999.5	1,124.3
1974-1st	212.6	510.9	307.6	266.4	277.3	238.7
2nd	217.3	447.0	304.5	222.8	233.5	312.1
3rd	222.4	425.2	319.5	181.9	219.9	340.6
4th	277.6	397.5	338.0	138.8	268.8	232.8
1975-1st	250.7	401.3	302.8	142.6	237.4	257.2
2nd	238.5	441.6	313.9	145.6	216.0	333.4
3rd						
4th						
	1974-75 percent change					
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
1st	+18.0	-21.5	-1.6	-46.5	-14.4	+7.8
2nd	+9.8	-1.2	+3.1	-34.6	-7.5	+6.8
3rd						
4th						

1/ Imports include butter equivalent of butteroil. 2/ Imports include Colby cheese; stocks do not include processed cheese. 3/ Excludes Mellorine.

Table 4--Milk: Supply and utilization in all dairy products, United States, 1960-74 1/

Year	Supply						Utilization						
	Production	Imports	Beginning stocks		Total	Total use	Exports and shipments			Domestic disappearance			
			Commercial	Government			Commercial 2/	USDA 3/	Total	Fed to calves	Food use: Military	Food use: Civilian consumption: Total	Food use: Civilian consumption: Per capita
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Lb.
1960	123,109	604	3,730	430	127,873	122,473	887	142	1,029	2,548	2,532	116,364	653
1961	125,707	760	4,192	1,208	131,867	121,964	784	148	932	2,432	2,472	116,128	641
1962	126,251	795	4,992	4,911	136,949	124,793	796	922	1,718	2,330	2,969	117,776	641
1963	125,202	915	4,338	7,818	138,273	128,585	2,122	3,371	5,493	2,245	2,964	117,883	632
1964	126,967	830	4,132	5,556	137,485	132,195	3,478	3,976	7,454	2,152	3,007	119,582	632
1965	124,180	923	4,317	973	130,393	125,937	1,710	648	2,358	2,061	2,819	118,699	620
1966	119,912	2,791	3,918	538	127,159	122,300	907	301	1,208	1,980	2,376	116,736	604
1967	118,732	2,908	4,813	46	126,499	118,247	593	231	824	1,891	2,117	113,415	581
1968	117,225	1,780	4,258	3,994	127,257	120,550	814	957	1,771	1,821	3,295	113,663	577
1969	116,108	1,621	3,983	2,724	124,436	119,092	942	477	1,419	1,745	2,696	113,232	569
1970	116,962	1,874	3,798	1,447	124,081	118,278	949	41	990	1,696	2,419	113,173	561
1971	118,532	1,346	3,705	2,098	125,681	120,577	1,063	1,963	3,026	1,644	2,031	113,876	558
1972	119,904	1,694	3,565	1,539	126,702	121,204	1,263	884	2,147	1,641	1,671	115,745	560
1973	115,385	3,860	3,493	2,005	124,743	119,535	1,213	79	1,292	1,595	1,257	115,391	554
1974 4/	115,416	2,932	4,732	476	123,556	117,670	1,133	25	1,158	1,595	1,137	113,780	543

1/ Milk equivalent, fat solids basis. 2/ Includes sales for dollars and government-to-government sales. 3/ Includes P.L. 480 and AID programs. 4/ Preliminary.

Table 5--Dairy products: Per capita civilian consumption, United States, 1960-74 1/

Year	Fluid milk and cream 2/			Cheese			Evaporated and condensed			Frozen products					Dry milk products			
	Sales of fluid products	Total	Butter	Whole and part skim milk 3/: American	Whole and part skim milk 3/: Other	Cottage cheese	Canned, whole milk	Bulk condensed, whole milk	Skim and buttermilk	Ice cream	Ice milk	Sherbet	Other frozen dairy products	Mellorine	Dry whole milk	Nonfat dry milk	Dry butter milk	Dry whey
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
1960	307	322	7.5	5.4	2.9	4.8	11.3	2.4	4.5	18.3	4.5	1.5	0.2	1.2	0.3	6.2	0.4	0.3
1961	298	312	7.4	5.7	2.9	4.6	10.8	2.5	4.8	18.0	5.0	1.4	.1	1.3	.3	6.2	.4	.3
1962	296	308	7.3	6.1	3.1	4.6	10.3	2.2	4.8	17.9	5.6	1.4	.2	1.3	.3	6.1	.4	.4
1963	296	307	6.9	6.1	3.1	4.6	9.5	2.1	4.5	18.0	6.0	1.5	.2	1.3	.3	5.8	.4	.4
1964	294	304	6.9	6.2	3.2	4.7	9.2	2.2	4.8	18.3	6.3	1.5	.2	1.3	.3	5.9	.4	.5
1965	292	302	6.4	6.2	3.4	4.6	8.6	2.1	5.0	18.5	6.6	1.5	.2	1.3	.3	5.6	.4	.6
1966	288	297	5.7	6.2	3.6	4.6	7.9	1.9	5.4	18.2	6.8	1.6	.2	1.3	.3	5.9	.3	.7
1967	277	285	5.5	6.4	3.7	4.5	7.3	1.7	5.0	17.8	7.0	1.5	.2	1.3	.3	5.6	.3	.9
1968	272	280	5.7	6.6	4.0	4.6	7.1	1.8	4.8	18.4	7.2	1.6	.2	1.4	.2	5.8	.3	1.1
1969	264	272	5.4	6.7	4.2	4.8	6.4	1.5	5.0	18.0	7.6	1.7	.2	1.3	.2	5.8	.3	1.2
1970	258	264	5.3	7.1	4.4	*5.2	5.9	1.2	5.0	17.7	7.8	1.6	.2	1.2	.2	5.4	.2	1.5
1971	253	259	5.1	7.4	4.7	5.4	5.7	1.1	5.1	17.5	7.8	1.6	.2	1.1	.2	5.3	.3	1.6
1972	257	263	4.9	7.8	5.4	5.4	5.2	1.2	4.8	17.4	7.7	1.6	.3	1.1	.1	4.6	.2	1.8
1973	251	257	4.8	8.0	5.7	5.3	4.9	1.1	4.3	17.5	7.7	1.7	.3	.9	.1	5.3	.2	1.8
1974 4/	238	244	4.6	8.6	6.0	4.7	4.4	1.2	3.5	17.5	7.7	1.6	.3	.8	.1	4.2	.2	2.2

1/ See table 15, DS-332, for earlier years. 2/ Milk equivalent, fat solids basis. 3/ Excludes cottage cheese. 4/ Preliminary. *1970-1974 revised.

In August and early September, CCC sold almost 21 million pounds of butter back to the industry for unrestricted use. The sell-back helped to ease the market tightness resulting from low seasonal stocks and continued strong sales. Government sales were made at then-current market prices since the market prices were higher than the announced CCC sale price of 10.5 cents over the support purchase price at any location. This brought net removals of butter down to less than 67 million pounds during January-August, which was still up from about 34 million pounds a year ago.

American cheese purchases fell to less than 5 million pounds in July and to only negligible amounts in August, far less than the 20 million pounds removed during July-August 1974. However, net removals of American cheese thus far in 1975 totaled 68 million pounds, almost three times the levels of the same months of 1974.

After averaging more than 75 million pounds a month during the second quarter of 1975, CCC purchases of nonfat dry milk fell to about 42 million pounds in July and less than 1 million pounds in August. The 1975 purchases of 412 million pounds through August were the highest for that period since 1968.

USDA purchases of butter and cheese likely will not be substantial during the rest of 1975 as wholesale prices are expected to remain above CCC's support purchase prices. Purchases of nonfat dry milk also may not reach sizable levels as manufacturers' stocks are fairly low. However, if actual use of nonfat dry milk has not picked up, the recent rises in wholesale prices may not be sustainable and government purchases might resume later this year.

Uncommitted CCC inventories of butter and cheese are at low levels, totaling 9 million pounds of cheese and only 3 million pounds of butter by the end of August. On the other hand, uncommitted inventories of nonfat dry milk remain high, even though they have ceased to grow. These holdings stood at 478 million pounds at the end of August, the highest since early 1963. With the shift of needy families from direct donation of commodities to food stamps, domestic donation outlets have become limited.

Uncommitted CCC stocks

Item	August 31	
	1974	1975
	Million pounds	*Million pounds*
Butter (bulk)	16.7	2.7
Cheddar cheese	.4	8.8
Nonfat dry milk	87.2	478.1

Commercial Dairy Stocks Manageable

Declining milk production and fairly strong dairy sales caused a very unusual counterseasonal drop in commercial dairy stocks during July. On August 1, dairy stocks in commercial hands totaled 5.5 billion pounds milk equivalent, down 30 percent from a year earlier but still the second highest for that date since 1967. The drop of less than 1 percent from July 1 was the first such drop in at least 30 years.

Commercial butter holdings totaled only about 33 million pounds on August 1, down two-thirds from last year and the second lowest for that date on record. The August 1 stocks were only slightly higher than on April 1 as declining butter production, continued strength in sales, and the earlier sales to USDA kept commercial stocks from attaining normal seasonal increases.

Dairy product stocks

Item	August 1, 1974	August 1, 1975	Percent change
	Million pounds	*Million pounds*	*Percent*
Butter			
Commercial	99.1	32.9	-66.8
Total	130.7	95.5	-26.9
American cheese			
Commercial	487.5	414.0	-15.1
Total	488.1	428.2	-12.3
Other cheese			
Commercial	77.9	65.7	-15.7
Nonfat dry milk			
Manufacturers'	199.8	87.4	-56.3
Total	225.0	484.8	+115.5
Milk equivalent[1]			
Commercial	7,824	5,506	-29.6
Total	8,484	6,941	-18.2

[1] Total all dairy products.

Commercial stocks of American cheese also did not exhibit normal seasonal increases. However, American cheese stocks were at fairly high levels in early 1975. Commercial holdings of American cheese stood at 414 million pounds on August 1, down 15 percent from a year ago but still the second highest on record for that date. Although high by the standards of earlier years, American cheese stocks are manageable in light of the recent drops in production and expected strength in sales. Stocks of other-than-American varieties came to less than 66 million pounds, the lowest levels for that date since 1970.

Manufacturers' stocks of nonfat dry milk stood at 87 million pounds on August 1, down 56 percent from a year earlier. This was the lowest August 1 level since 1950 and the lowest monthly level since early 1974. Although low compared with earlier

years, manufacturers' stocks of nonfat dry milk remain adequate relative to weak sales.

Commercial dairy stocks likely will decline seasonally in late 1975. The tightness in butter stocks has been partially eased by the sales of CCC-owned butter back to the industry. After an initial jump, commercial butter stocks should settle back into a normal seasonal pattern. American cheese holdings likely will show sizable seasonal declines, although they could become somewhat burdensome if expected strength in sales does not develop. Recent sharp declines in manufacturers' stocks of nonfat dry milk may slow as user inventories are built up, unless actual use rises sharply.

Government stocks were equivalent to 1.4 billion pounds of milk on August 1, more than twice the year-earlier level but still less than any other year since 1966. USDA stocks included almost 63 million pounds of butter, 14 million pounds of American cheese, and 397 million pounds of nonfat dry milk, all well above year-earlier levels. Total government stocks will be declining in coming months with the opening of schools and the sales of butter.

Federal Order Summary—First Half 1975[1]

Handlers regulated under Federal milk orders received nearly 36 billion pounds of milk from about 126,300 producers during the first half of 1975—around 62 percent of the total milk marketed in the United States (table 6). Producer receipts at Federal order plants were more than 3 percent above January-June 1974, reflecting a 3.5 percent increase in deliveries per producer. For the first half of 1975, daily deliveries per producer averaged 1,560 pounds. The number of producers delivering to Federal order markets decreased only slightly from 1974 to 1975 as a 7.5 percent increase in the number of producers delivering to the Chicago Regional market helped offset the 1 percent decrease in the other markets. The gain in producer numbers in Chicago market and lesser gains in certain other North Central markets reflect the shift to one grade of milk and the association of these newly qualified Grade A producers with Federal order pools in order to share in the higher-valued fluid proceeds.

Class I sales in January-June increased 3.4 percent from 1974 to 1975. While the volume of producer milk in Class I went up, it did not match the gain in producer deliveries and Class I utilization dropped from 56 to 55 percent.

Sales of lowfat and skim milk items are again increasing vigorously, after having lost some of their vitality last year. In June of this year, such items accounted for 32 percent of total fluid sales, up from about 30 percent last June. Whole milk sales decreased to 66 percent of total fluid sales in June compared with 68 percent last June. Cream items, milk and cream mixtures, yogurt, and eggnog accounted for the remaining 2 percent.

During the first half of 1975, minimum Class I prices averaged $8.94 per 100 pounds of milk, $1.11 less than last year. The average minimum producer blend price was $8.02 per 100 pounds during January-June, down 75 cents from last year's $8.77 price. In February, USDA amended the Class I price provision in all orders so that Class I prices in February and March 1975 would more rapidly reflect increases in the price for manufacturing milk that resulted from the January increase in the support price.

Merger and Expansions. Several actions have been taken this year to consolidate orders and expand the market order program into new areas. Effective July 1, six former orders in Texas were merged and expanded and became the new "Texas" order. This action reduced the number of Federal milk marketing areas from 61 to 56, encompassing 144.5 million people. A hearing to consider the merger of three orders in Tennessee and Virginia and expansion into areas of West Virginia and Kentucky was held in June. Recommended decisions on hearings to consider the merger of the Boston Regional and the Connecticut orders and the merger of five orders in Minnesota and the Dakotas are pending.

During the first half of 1975, the Great Basin and Middle Atlantic marketing areas were expanded. In April, hearings were held to consider the expansion of the New Orleans milk marketing order into parts of Mississippi and the expansion of the Northern Louisiana order to cover that portion of Louisiana not previously under Federal regulation.

FOREIGN TRADE AND DAIRY TRENDS

Dairy Imports Steady

U.S. imports of dairy products during January-July were equivalent to less than 0.7 billion pounds of milk, down sharply from 2.0 billion pounds a year earlier and somewhat below the levels of the early 1970's (table 7). Imports have been below normal during much of 1975.

Cheese imports this summer continued to run below year-earlier levels. The 1975 total of both quota and non-quota types through July came to about 74 million pounds, compared with 215 million pounds during the same period of 1974. While this difference largely reflects the one-time special import quota of 100 million pounds of Cheddar

[1]Prepared by John R. Mengel, Program Analysis Branch, Dairy Division, Agricultural Marketing Service, USDA.

Table 6.--Measures of growth in Federal milk order markets, selected years, 1950-74

Year	Number of			Producer deliveries			Prices, 3.5 percent butterfat 3/		Receipts as percent of milk sold to plants	Daily deliveries per producer	Gross value per producer 4/
	Markets 1/	Handlers 1/	Producers 2/	Total	Used in Class I	Percentage in Class I	Class I	Blend			
	No.	No.	No.	Mil. lb.	Mil. lb.	Pct.	Dol./ cwt.	Dol./ cwt.	Pct.	Lb.	Dol.
1950	39	1,101	156,584	18,660	11,000	58.9	4.51	3.93	25	336	5,050
1955	63	1,483	188,611	28,948	18,032	62.3	4.67	4.08	32	430	6,598
1960	80	2,259	189,816	44,812	28,758	64.2	4.88	4.47	43	648	10,482
1961	81	2,314	192,947	48,803	29,859	61.2	4.91	4.45	45	704	11,131
1962	83	2,258	186,468	51,648	31,606	61.2	4.80	4.14	47	761	11,854
1963	82	2,144	176,477	52,860	32,964	62.4	4.78	4.15	48	821	12,814
1964	77	2,010	167,503	54,447	33,965	62.4	4.87	4.23	48	888	14,174
1965	73	1,891	158,077	54,444	34,561	63.5	4.93	4.31	48	944	15,300
1966	71	1,724	145,964	53,012	34,805	65.7	5.55	4.95	48	994	18,526
1967	74	1,650	140,657	53,761	34,412	64.0	5.85	5.17	49	1,056	20,321
1968	67	1,637	141,623	56,444	36,490	64.6	6.23	5.53	52	1,089	22,561
1969	67	1,628	144,275	61,026	39,219	64.3	6.50	5.74	56	1,164	24,892
1970	62	1,588	143,411	65,104	40,063	61.5	6.74	5.95	59	1,244	27,636
1971	62	1,529	141,347	67,872	40,268	59.3	6.90	6.08	60	1,316	29,893
1972	62	1,487	136,881	68,719	40,938	59.6	7.10	6.31	60	1,372	32,439
1973	61	1,355	131,565	66,229	40,519	61.2	8.03	7.31	60	1,386	37,461
1974 5/	61	1,312	126,919	67,780	39,293	58.0	9.35	8.36	62	1,463	45,370

1/ End of year (date on which pricing provisions became effective).
2/ Average for the year.
3/ Prices are simple averages for 1950-61 and weighted averages for 1962-73.
4/ At blend price adjusted for butterfat content.
5/ Preliminary.

Table 7--Dairy products: U.S. imports, quota and non-quota, total 1974, and January-July 1974-75 1/

Product	Calendar year quota	1974 imports	July			Cumulative, January-July		
			1974	1975	1975 as a % of 1974	1974	1975	1975 as a % of 1974
	Thou. lb.	Thou. lb.	Thou. lb.	Thou. lb.	Pct.	Thou. lb.	Thou. lb.	Pct.
Cheese, quota types								
American-Cheddar	10,037.5	107,017	602	10	2	100,678	1,928	2
-Other	6,096.6	5,101	10	4	40	793	59	7
Italian-Original loaves	11,500.1	8,982	648	568	88	5,860	3,249	55
-Other	1,494.0	1,185	207	150	72	848	588	69
Edam and Gouda-Natural	9,200.4	(9,371)	(679)	(578)	(85)	(4,017)	(4,342)	(108)
-Processed	3,151.0							
Blue Mold	5,017.0	5,015	416	516	124	2,581	2,036	79
Swiss-Emmenthaler, -86¢*	20,420.0	12,565	1,180	895	76	7,280	5,206	72
-Gruyere-process, -86¢*	11,242.0	6,191	449	379	84	3,582	1,999	56
Other-Over 0.5% fat, -86¢*	40,730.0	34,452	1,940	1,600	82	14,265	5,135	36
-Under 0.5% fat	8,901.0	7,860	2,403	885	37	5,943	2,336	39
Total	127,789.6	197,739	8,534	5,585	65	145,847	26,878	18
Cheese, non-quota types								
Swiss-Emmenthaler, 86¢ +*		51,297	3,741	3,715	99	31,253	18,610	60
-Gruyere, process, 86¢ +*		9,113	1,075	827	77	4,546	2,604	57
Other, 86¢ +*		37,698	2,854	2,163	76	22,414	14,050	63
Pecorino		16,465	1,100	773	70	9,053	10,169	112
Roquefort		1,439	21	116	552	874	705	81
Other 2/		1,908	322	224	70	1,015	754	74
Total		117,920	9,113	7,818	86	69,155	46,892	68
Other quota products								
Butter	707.0	450	60	79	132	173	270	156
Butteroil	1,200.0	1,200	---	---	---	1,200	1,200	100
Butterfat mixtures	2,580.0	---	---	---	---	---	2	---
Ice cream	3,377.3	---	---	---	---	---	---	---
Frozen cream	12,540.0	12,406	779	854	110	4,715	5,322	113
Nonfat dry milk	1,807.0	115,065	1,318	35	3	114,179	1,088	1
Dried buttermilk	496.0	137	---	335	---	137	763	557
Evaporated milk	1,312.0	1,214	---	---	---	1,209	418	35
Condensed milk	4,079.0	1,393	50	18	36	1,069	307	29
Chocolate crumb-Regular	17,000.0	4,748	502	360	72	2,855	660	23
-Lowfat	4,680.0	---	---	---	---	---	---	---
Animal feed with milk solids	16,300.0	9,009	1,626	1,315	81	6,333	4,498	71
Non-quota products								
Casein		113,328	8,871	4,663	53	75,982	24,692	32
Lactose		1,310	260	45	17	892	5,233	587
Milk equivalent, fat solids basis, total all products	1,305,620	2,931,969	138,037	115,374	84	2,000,310	694,433	35

1/ Preliminary. 2/ Gjetost, Bryndza, Cammelost and Noekkelost, and Goya.
*Price break effective April 9, 1975.

cheese which was authorized last year, another factor has been the uneasiness of cheese traders which resulted from the threat of U.S. imposition of countervailing duties on European cheese. The Treasury Department has recently announced that investigations have been initiated as to whether a bounty or grant, within the meaning of the countervailing duty statute, exists in the cases of cheese from Norway, Finland, and Sweden. Preliminary findings that subsidies are being paid have already been published in the cases of Switzerland and Austria.

Imports, under quota, of butter, frozen cream, and dried buttermilk have been somewhat higher this year while nonfat dry milk, canned milk, chocolate crumb, and animal feed imports have been down. Non-quota imports of casein have been substantially lower while lactose imports have been running well above a year earlier.

Higher Nonfat Dry Milk Exports

Exports of nonfat dry milk totaled 124 million pounds during the first 7 months of 1975, up from only 4 million pounds a year ago. Almost all the increase was due to government exports under the Food for Peace program, which were made possible by the increased USDA purchases and stocks. Around 200 million pounds more may be programmed for foreign donations under Title II before July 1976, mostly by charitable organizations. Nonfat dry milk exports are already at the highest annual level since 1972. Even with the heavy government supplies, exports are not likely to reach the 400-million-pound levels of the early 1970's.

Only small amounts of other dairy products have been exported this year. January-July exports of dairy products totaled 0.3 billion pounds milk equivalent, almost the same as a year earlier. The U.S. exported more canned milk and other-than-American cheese thus far in 1975, about the same amounts of American cheese and infant and dietetic foods, but less butter than a year ago. Commercial exports of these dairy products are likely to remain low as lower-priced sources are generally available.

January-July dairy product exports

Product	1974	1975	Change
	Million pounds	*Million pounds*	*Percent*
Butter[1]	0.9	0.7	-22.2
Cheese	4.6	4.7	+2.2
Evaporated milk	25.7	28.7	+11.7
Condensed milk	1.0	1.2	+20.0
Dry whole milk	25.8	19.8	-23.3
Nonfat dry milk	4.0	123.5	+2,987.5
Milk equivalent[2]	345.2	326.6	-5.4

[1] Includes butter equivalent of butteroil and anhydrous milkfat. [2] Includes some products not shown separately.

An additional 0.3 billion pounds milk equivalent was shipped to U.S. territories during January-June, slightly less than a year earlier. Shipments of all products except dry whole milk and condensed milk were below year-earlier levels. Butter shipments were down sharply but American cheese, by far the largest component of these shipments, showed only moderate declines.

The World Dairy Situation[1]

World milk production may rise about 1 percent this year to a new record high. Increased milk production, coupled with recession-squeezed consumer demand, is creating larger levels of dairy stocks —especially of nonfat dry milk. International dairy markets in 1975 are thus being influenced by various governments' attempts to dispose of mounting publicly owned stocks and to prevent future oversupply.

Total 1975 milk production in 39 major producing countries is estimated at a record of almost 848 billion pounds, up around 1 percent from 1974. Milk production forecasts for 1975 show strong growth in Eastern Europe, moderate gains in Western Europe, and little or no growth in Oceania, the USSR, and the United States.

Cheese output in major producing nations is expected to expand only slightly in 1975 after several years of vigorous growth. Production is estimated at about 16 billion pounds, around 1 percent over 1975. Cheese output had increased almost 6 percent a year from 1971 to 1974. The slowdown reflects sagging consumer demand and large stocks in Western Europe and North America, as well as improved prices for butter which competes with cheese for milk supplies.

Butter production in major producing countries is estimated at some 12 billion pounds in 1975, up 1 percent from last year. Virtually the entire gain is expected to be in the United States and the European Community, as a result of high prices for competitive vegetable oils in late 1974 and early 1975.

Nonfat dry milk (NFDM) production in the western market countries (North American, Western Europe, and Oceania) may reach almost 7 billion pounds this year, about 6 percent above 1974. The European Community (EC), which produces about three-fifths of the total, is expected to increase its output to 4 billion pounds, up nearly 7 percent. The growth of EC production continues a long-term trend of rapid expansion; between 1964 and 1975, production increased 2½ times. This growth reflects not only steadily expanding milk output but also greater use of skim milk for manufacture of nonfat

[1] Material prepared by Lloyd J. Fleck, Dairy, Livestock, and Poultry Division, Foreign Agricultural Service, USDA.

dry milk. In 1964, about a half pound of NFDM was processed for each pound of butter produced; in 1975, this was up to over a pound.

Expanding production, coupled with declining consumption and trade, will boost 1975 NFDM stocks to record highs. Year-ending stocks in the western market countries are estimated at over 2 billion pounds, up 72 percent from a year ago Nearly two-thirds of this total (some 1.5 billion pounds) will be held by the EC.

Table 8.--U.S. Dairy Situation at a Glance

Item	Unit or base period	1973	1974					1975		
		July	May	June	July	August	Year	May	June	July
Production and cow numbers:										
Total milk	Mil. lb.	10,014	10,841	10,563	10,139	9,690	115,416	10,789	10,460	9,998
Milk per cow	Lb.	881	967	943	905	865	10,286	968	938	897
Number of milk cows	Thou.	11,369	11,216	11,206	11,205	11,207	11,221	11,150	11,147	11,142
Prices received by farmers:										
All milk, sold to plants, 100 pounds	Dol.	6.57	8.25	7.69	7.61	7.74	8.32	7.98	7.94	8.19
Percentage of parity 1/	Pct.	75	87	81	77	73	81	76	70	76
Manufacturing grade milk, 100 pounds	Dol.	5.72	6.86	6.42	6.31	6.46	7.13	7.05	7.08	7.25
Parity equivalent	Dol.	7.40	8.38	8.38	8.47	8.71	8.52	9.39	9.47	9.47
Fat content	Pct.	3.51	3.58	3.55	3.51	3.55	3.66	3.61	3.56	3.54
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol.	5.78	6.93	6.31	6.29	6.39	7.06	7.02	7.11	7.35
Milk eligible for fluid market, 100 pounds	Dol.	6.85	8.68	8.09	8.00	8.10	8.66	8.26	8.21	8.46
Price ratios and dairy ration values:										
Milk-feed	Lb.	1.35	1.45	1.36	1.29	1.16	1.33	1.36	1.36	1.40
Manufacturing grade milk-hog	Lb.	.14	.26	.27	.18	.18	.21	.16	.15	.13
Manufacturing grade milk-beef cattle	Lb.	.13	.19	.20	.18	.17	.20	.19	.18	.20
Value of concentrate ration fed milk cows	Dol.	4.88	5.70	5.63	5.87	6.68	6.23	5.88	5.82	5.85
Farm cash receipts from dairy products	Mil. dol.	628	883	788	747	723	9,399	845	808	793
Production of factory products:										
Creamery butter	Mil. lb.	67.7	102.2	95.2	80.8	70.4	961.7	101.6	88.3	70.4
American cheese, whole milk	Mil. lb.	153.4	191.5	188.3	165.2	144.2	1,858.6	168.4	170.7	153.0
Cheese, other than American	Mil. lb.	83.3	90.5	89.5	86.5	88.1	1,071.8	95.8	102.5	96.9
Canned milk, unskimmed	Mil. lb.	100.6	108.6	102.7	102.7	84.8	1,035.2	96.6	97.1	85.8
Dry whole milk	Mil. lb.	5.5	8.4	7.0	5.7	4.0	67.7	7.4	8.1	5.2
Frozen products 2/	Mil. gal.	119.5	104.3	113.8	122.7	118.4	1,124.3	112.9	123.2	126.4
Creamed cottage cheese	Mil. lb.	83.1	77.5	70.9	75.0	73.0	855.5	81.3	76.9	77.5
Total whole milk equivalent 3/	Mil. lb.	5,209	6,187	6,130	5,688	5,124	60,821	6,013	5,985	5,389
Nonfat dry milk, human use	Mil. lb.	86.2	125.7	138.1	118.7	99.1	1,019.9	131.4	126.5	98.7
Wholesale prices:										
Butter, 92-score, Chicago, pound	Ct.	63.4	60.5	60.6	60.8	67.1	65.7	69.2	69.2	76.6
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct.	68.4	77.9	71.1	71.2	72.5	79.9	80.6	82.4	84.8
Evaporated milk, case (mid-point of range)	Dol.	9.46	11.93	11.93	11.93	11.93	11.76	12.08	11.98	12.03
Dry whole milk, pound	Ct.	54.8	67.2	63.0	60.8	61.6	65.9	65.0	65.9	67.5
Nonfat dry milk, pound	Ct.	46.1	62.1	57.5	56.9	57.2	58.6	60.2	60.4	60.4
Dairy products and ice cream index (BLS)	1967=100	127.1	146.9	142.9	141.7	142.4	146.4	149.6	150.5	153.2
Retail prices (BLS):										
Milk, fresh, grocery, half-gallon	Ct.	63.2	80.4	79.9	78.4	77.5	78.4	77.4	77.2	77.0
Evaporated milk, 14½-ounce can	Ct.	22.4	28.6	28.8	29.2	29.8	28.8	30.4	30.4	30.4
Cheese, American, processed, sliced, ½-pound package	Ct.	59.4	75.7	74.6	72.3	70.9	72.9	74.2	74.3	75.1
Butter, pound	Ct.	85.0	94.1	91.0	90.3	90.5	94.6	95.3	95.7	95.7
Ice cream, half-gallon	Ct.	88.8	105.2	107.4	108.4	108.6	107.6	121.5	121.3	121.3
Dairy products index	1967=100	124.1	154.6	153.8	151.6	150.7	151.9	153.6	153.3	153.4
All foods index	1967=100	140.9	159.7	160.3	160.5	162.8	161.7	171.8	174.4	178.6
Margarine, colored, pound	Ct.	35.2	53.8	54.7	54.5	57.5	57.4	63.4	60.4	59.2
Stocks, end of month:										
Creamery butter	Mil. lb.	143.8	97.4	117.5	130.7	122.0	---	85.2	99.7	95.5
Cheese, total 4/	Mil. lb.	392.9	533.4	570.8	566.0	552.4	---	454.9	479.9	493.8
Canned milk, unskimmed	Mil. lb.	133.7	110.1	127.8	156.6	167.8	---	84.2	104.1	114.7
Dry whole milk	Mil. lb.	9.6	11.0	13.1	13.4	12.6	---	7.6	7.3	6.4
Total whole milk equivalent 5/	Mil. lb.	6,983	7,354	8,174	8,484	8,202	---	6,296	6,874	6,941
Nonfat dry milk	Mil. lb.	100.7	148.0	196.1	225.0	252.0	---	379.7	438.2	484.8
Commercial disappearance:										
Creamery butter	Mil. lb.	58.2	78.4	70.7	72.0	76.6	929.9	77.6	76.9	75.3
Cheese, American	Mil. lb.	145.9	155.2	156.2	160.3	138.3	1,780.6	147.2	147.3	138.6
Cheese, other than American	Mil. lb.	102.6	99.6	95.7	109.8	107.8	1,269.5	103.9	109.2	109.5
Canned milk, unskimmed	Mil. lb.	71.7	70.4	81.3	71.5	70.6	999.5	70.8	75.0	72.7
Milk in all products	Mil. lb.	9,566	9,706	9,463	9,731	9,629	112,810	9,805	9,740	9,773
Nonfat dry milk	Mil. lb.	158.2	61.7	75.6	59.9	61.9	809.9	50.2	50.0	78.1
USDA net removals:										
Butter	Mil. lb.	2.7	8.3	13.0	9.4	*	32.7	21.8	8.2	2.3
Cheddar cheese	Mil. lb.	.7	.7	.9	4.2	15.6	60.3	10.6	6.8	4.8
Nonfat dry milk	Mil. lb.	.8	9.4	29.5	52.5	46.9	265.0	73.9	84.2	41.7
Evaporated milk	Mil. lb.	9.6	5.2	4.1	2.1	3.1	28.3	1.9	2.3	2.4
Total whole milk equivalent	Mil. lb.	87	190	292	242	162	1,346	559	241	101
Fluid sales, change from year earlier: 6/										
Whole milk	Pct.	-1.9	-8.4	-6.7	-6.2	-3.6	-6.2	-1.4	-.2	
Cream and cream mixtures	Pct.	+1.9	-.1	-3.0	+4.7	+5.8	+2.3	+4.7	+3.5	
Low-fat and skim milk	Pct.	+7.8	+5.3	+2.8	+3.4	+5.2	+6.6	+10.0	+10.1	
Total	Pct.	+1.7	-4.6	-4.0	-3.4	-1.1	-2.7	+2.1	+2.9	

1/ Seasonally adjusted price as percentage of parity price.
2/ Ice cream, ice milk, and sherbet.
3/ Includes manufactured products for which current monthly series are available.
4/ Natural, plus process American cheese held by CCC.
5/ Excludes cream and bulk condensed milk.
6/ Daily average sales in Federal and State Marketing areas.
*Less than 50,000 pounds.

MILK-FEED PRICE RATIO—A LIMITED INDICATOR

by

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ABSTRACT: The milk-feed price ratio is a useful way of comparing milk and concentrate prices. However, any milk-feed price relationship has limited value as an indicator of dairymen's economic well-being since it does not account for changes in other costs. During periods of rapidly fluctuating grain prices, other ways of expressing milk-feed price relationships, such as the difference in milk and concentrate costs or returns over concentrate costs, may be important supplements to the milk-feed price ratio.

KEY WORDS: Dairy, milk, feed, prices.

The milk-feed price ratio is one of the most widely used dairy statistics. Part of its popularity is due to its relatively simple concept. The milk-feed price ratio is the pounds of concentrate ration equal in value to one pound of milk and is computed by dividing the price per 100 pounds of all milk sold to plants by the weighted average value per 100 pounds of dairy concentrate ration, as reported by the Statistical Reporting Service. Therefore the ratio measures the relative position of milk and feed prices.

The milk-feed ratio is a useful tool to compare milk prices and feed prices. In addition, the higher the milk-feed price ratio, the better the economic position of dairymen if forage and other costs remain the same. However, during a period of rapidly changing costs, the milk-feed price ratio must be used with care.

The milk-feed price ratio is often used as the sole indicator of the economic well-being of dairy producers. For this purpose, any milk-feed price relationship, including the ratio, has some serious shortcomings, especially during a period of rapidly fluctuating grain prices. It does not account for changes in non-feed costs, which may be as important as feed costs in a dairy operation. Feed prices can rise much more sharply than other costs and can drop sharply, while other costs seldom decline. Thus, when grain prices are rising rapidly, the dairymen's position may be better than the milk-feed price ratio alone would indicate and may not be as good as indicated when feed prices are falling. In addition, the milk-feed price ratio measures only the concentrate portion of total feed costs and ignores roughage costs. Changes in hay prices or the costs of producing home-grown roughages are not reflected.

The milk-feed price ratio is not the only way of expressing milk-feed price relationships (table 9). One way of supplementing the milk-feed ratio is to use the difference in value between a pound of milk and a pound of feed. This difference may give a different picture when grain prices fluctuate widely, since milk prices must rise more in absolute amount than feed prices to maintain the same milk-feed price ratio. If feed prices rise $1 per 100 pounds, milk prices must rise $1.50 to maintain a 1.5 ratio but must rise only $1 to maintain the same difference. For example in March 1973, the all milk price was $6.54 and the ration value was $4.29 per 100 pounds, resulting in a 1.52 milk-feed price ratio. In March 1974, the ratio was down to 1.49 as the ration value was $6.01 and the milk price was $8.96. However, the difference between the milk price and ration value was actually about 30 percent greater in 1974, even though the ratio was slightly lower.

To accurately show the difference between milk prices and concentrate costs, it is necessary to compare milk prices with the value of concentrates used to produce that milk, somewhat less than a

Table 9.--Milk-feed price relationships, monthly, 1972-75

Year and month	All milk sold to plants	Ration value	Milk-feed ratio	Milk-feed difference	Returns over concentrate cost 1/
	Dol. per cwt.	Dol. per cwt.	Pounds	Dol. per cwt.	Dol. per 100 lbs. of milk
1972					
January	6.12	3.37	1.82	2.75	4.71
February	6.13	3.38	1.81	2.75	4.71
March	6.02	3.39	1.78	2.63	4.60
April	5.86	3.41	1.72	2.45	4.43
May	5.79	3.42	1.69	2.37	4.36
June	5.72	3.43	1.66	2.29	4.28
July	5.80	3.45	1.68	2.35	4.35
August	5.99	3.49	1.72	2.50	4.53
September	6.21	3.54	1.75	2.67	4.73
October	6.38	3.61	1.77	2.77	4.87
November	6.52	3.73	1.75	2.79	4.96
December	6.54	3.97	1.64	2.57	4.88
1973					
January	6.56	4.13	1.59	2.43	4.77
February	6.60	4.18	1.58	2.42	4.79
March	6.54	4.29	1.52	2.25	5.68
April	6.43	4.26	1.51	2.17	4.58
May	6.40	4.57	1.40	1.83	4.42
June	6.40	5.06	1.26	1.34	4.20
July	6.57	4.88	1.35	1.69	4.45
August	7.19	5.67	1.27	1.52	4.73
September	7.87	5.22	1.51	2.65	5.60
October	8.32	5.30	1.57	3.02	6.02
November	8.66	5.35	1.62	3.31	6.34
December	8.80	5.60	1.57	3.20	6.37
1974					
January	8.89	5.77	1.53	3.12	6.43
February	8.92	5.90	1.51	3.02	6.41
March	8.96	6.01	1.49	2.95	6.40
April	8.84	5.88	1.51	2.96	6.34
May	8.25	5.70	1.45	2.55	5.82
June	7.69	5.63	1.36	2.06	5.29
July	7.61	5.87	1.29	1.74	5.11
August	7.74	6.68	1.16	1.06	4.89
September	8.07	6.65	1.21	1.42	5.24
October	8.34	6.88	1.21	1.46	5.41
November	8.48	6.91	1.22	1.57	5.54
December	8.25	6.87	1.20	1.38	5.32
1975					
January	8.33	6.64	1.25	1.69	5.50
February	8.28	6.21	1.33	2.07	5.63
March	8.13	5.90	1.38	2.23	5.62
April	8.09	5.94	1.36	2.15	5.56
May	7.98	5.88	1.36	2.10	5.48
June	7.94	5.82	1.36	2.12	5.46
July	8.19	5.85	1.40	2.34	5.70
August	8.47	6.08	1.39	2.39	5.88

1/ Average feeding rate for 1974 used to estimate 1975 levels.

half pound of grain per pound of milk. The average amount of concentrates fed per 100 pounds of milk is published just once a year so its appropriateness to any particular month may vary. However, this figure can be used to approximate the value of concentrates used to produce 100 pounds of milk by multiplying it by the value per pound of concentrates fed. The all milk price minus the value of concentrates fed to produce 100 pounds of milk gives an approximation of average returns over concentrate costs. These returns over concentrate costs can paint a much different picture than the milk-feed price ratio. For example, in August 1972 the milk-feed price ratio stood at 1.72, which is commonly purported to be a favorable level for dairy producers. With a $5.99 all milk price, a ration value of $3.49, and 41.9 pounds of concentrates fed per 100 pounds of milk that year, returns over concentrate costs were $4.53 per 100 pounds of milk. In August 1974, the milk-feed price ratio was all the way down to 1.16 but returns over concentrate costs stood at $4.89 per 100 pounds of milk, or about 8 percent more than in August 1972. This does not indicate, by any means, that dairy farmers were "better off" than in 1972. What it does indicate is that actual returns, relative to feed costs, had not deteriorated to the point suggested by the milk-feed price ratio.

While very useful as general guides, all milk-feed price relationships should be used carefully and with an understanding of both their true significance and their limitations.

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